

## PATENT ABSTRACTS OF JAPAN

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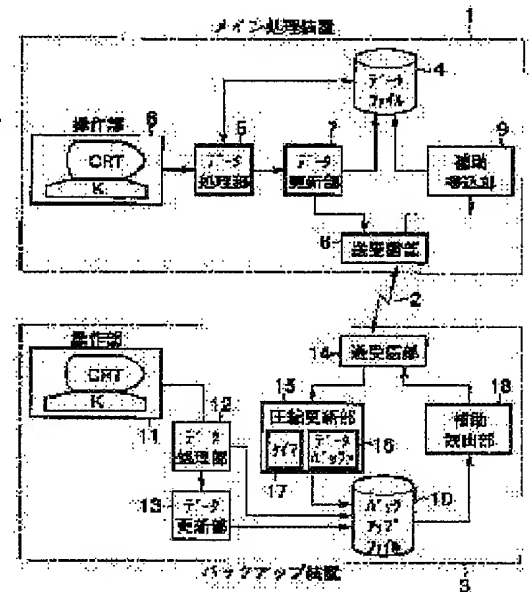
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## (54) BACKUP SYSTEM

## (57)Abstract:

**PROBLEM TO BE SOLVED:** To efficiently match data in the backup file of a backup device with data in the data file of a main processor.

**SOLUTION:** This system is provided with a data updating part 7 for updating the data in a data file 4 with update data to be successively generated at a data processing part 5 and successively transmitting the update data to be successively generated to a backup device 3 at a main processor 1, and a compressing and updating part 15 for storing/holding the update data successively received from the main processor 1 for prescribed time, storing/holding only the latest update data concerning the update data of the same data attribute and updating the data in a backup file 10 with the stored/held update data after the lapse of prescribed time.



**Partial English Translation of  
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[0061]

In the third embodiment, a compression data table preparation unit 20 and a compression data table 21 as the first compression memory storage means are incorporated in a main processing device 1b, and a compression data table preparation unit 22 and a compression data table 23 as the second compression memory storage means are incorporated in a back-up device 3b. Further, a comparison unit 24 is incorporated in back-up device 3b.

[0062]

Data update unit 7 in main processing device 1b uses update data sequentially generated in data processing unit 5 to update corresponding data in data file 4, and transmits the update data to back-up device 3b via transmission/reception unit 8 each time. Compression update unit 15 in back-up device 3b stores the update data sequentially transmitted from main processing device 1a for a predetermined period, and then updates each data in back-up file 10. That is, data in back-up file 10 is updated according to the procedure identical to that in the first embodiment shown in Fig. 1.

[0063]

Then, compression data table preparation unit 20 in main processing device 1b stores each update data sequentially output from data processing unit 5 in compression data file 21 corresponding to data buffer 16 such that each data is sorted by attribute, according to the procedure substantially identical to that for data compression unit 15a in the second embodiment shown in Fig. 3. On this occasion, if data with the same data attribute is already stored in compression data file 21, the already stored data is overwritten with new update data.

[0064]

Compression data table preparation unit 22 in back-up device 3b also stores each update data sequentially received from main processing device 1b in compression data file 23 such that each data is sorted by attribute, as in compression data table preparation unit 20 in main processing device 1b described above. On this occasion, if data with the same data attribute is already stored in compression data file 23, the already stored data is overwritten with new update data.

...omitted...

[0069]

Further, in the third embodiment, compression data tables 21, 23 with the same configuration storing each update data sequentially generated in data processing unit 5 in main processing device 1b so as to avoid overlapping of data with the same data attribute are provided in main processing device 1b and back-up device 3b, respectively, and whether the contents stored in the both devices match is periodically confirmed. Thereby, reliability of the back-up system is ensured. In addition, since the latest update data for respective data attributes are compared, the number of update data to be compared is minimized, improving comparison processing efficiency.

...omitted...

[0072]

Further, data compression memory means with the same configuration storing each update data sequentially generated in the main processing device so as to avoid overlapping of data with the same data attribute is provided in the main processing device and the back-up device, and whether the contents stored in the both devices match is periodically confirmed. Therefore, in addition to the effect described above, reliability of a business processing system incorporating the back-up system of the present invention can further be improved.

...omitted...

【図 5】

